

WHAT WE CLAIM IS:

1. An electromagnetic-wave-shielding film, having a transparent support and a conductive layer composed of a metal thin film, wherein the conductive layer is composed
5 of a mesh film in which random mesh portions are formed.

2. The electromagnetic-wave-shielding film as claimed in claim 1, wherein a shape of the random mesh
10 portions formed in the conductor layer is formed by intersecting points obtainable by shifting lattice lines of a regular lattice pattern from the original position thereof.

3. The electromagnetic-wave-shielding film as
15 claimed in claim 2, wherein a range within which the intersecting points of the lattice lines of the random mesh pattern are arranged, is located within an area defined by linking middle points between an individual
20 intersecting point and each adjacent point thereof of the regular lattice pattern before shifting the lattice lines.

4. The electromagnetic-wave-shielding film as claimed in claim 1, wherein the mesh film formed by the
25 metal thin film is formed by etching according to a

photolithography method.

5. The electromagnetic-wave-shielding film as
claimed in claim 1, whose lines which form the random mesh
5 shape each have a width of 15 μm or less.

6. The electromagnetic-wave-shielding film as
claimed in claim 1, whose lines which form the random mesh
shape each have a thickness in the range of 0.1 to 10 μm

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7. The electromagnetic-wave-shielding film as
claimed in claim 1, wherein a unit space area of the mesh
formed by the metal thin film is two fifths or less of a
pixel area of an image display device.

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8. The electromagnetic-wave-shielding film as
claimed in claim 1, whose surface is being subjected to
blackening.

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9. The electromagnetic-wave-shielding film as
claimed in claim 1, in which an infrared-ray cutting layer
containing a dye that absorbs light in an infrared-ray
range, is formed.

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10. The electromagnetic-wave-shielding film as

claimed in claim 9, in which a visible-light absorbing layer containing a dye that absorbs light in a visible-light range is formed.

- 5 11. A method of producing an electromagnetic-wave-shielding film having a transparent support and a conductive layer composed of a metal thin film, comprising the step of:

forming the conductive layer by using a mesh film in
10 which random mesh portions are formed.

12. The method as claimed in claim 11, comprising forming the random mesh portions to be formed in the conductive layer, by using a shape formed by intersecting
15 points obtainable by shifting lattice lines of a regular lattice pattern from the original position thereof.

13. The method as claimed in claim 11, comprising forming the mesh film formed by the metal thin film, by
20 electroless plating.

14. The method as claimed in claim 11, comprising forming the mesh film formed by the metal thin film, by etching according to a photolithography method.

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15. An image display device, wherein an electromagnetic-wave-shielding film, having a transparent support and a conductive layer composed of a metal thin film, is mounted on a front surface of the device, the
5 conductive layer being composed of a mesh film in which random mesh portions are formed.

16. The image display device as claimed in claim 15, wherein the electromagnetic-wave-shielding film mounted on
10 the front surface, has a unit space area of the mesh formed by the metal thin film of two fifths or less of a pixel area of the image display device, and has the random mesh portions in the conductive layer, which are formed by intersecting points obtainable by shifting lattice lines
15 of a regular lattice pattern from the original position thereof.

17. The image display device as claimed in claim 15, wherein the electromagnetic-wave-shielding film mounted on
20 the front surface, has an infrared-ray cutting layer containing a dye that absorbs light in an infrared-ray range, in the film.

18. The image display device as claimed in claim 15,
25 which is a plasma display panel, wherein the

electromagnetic-wave-shielding film is mounted on the front surface thereof.